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**Planning for the Unplannable:
Branches, Sequels and Reserves**

**A Monograph
by
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Armor**



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AirLand Battle doctrine introduced the operational level of war- the design and conduct of campaigns and major operations- to the U.S. Army. Operational art begins with operational planning. FM 100-5 identifies branches, sequels, and the employment of operational reserves as important factors in operational planning. But beyond stating their importance, doctrine provides little discussion. This monograph addresses the question of how branches, sequels, and operational reserves enable the operational commander to achieve his objectives.

The monograph looks at four campaigns and major operations: Sicily, Normandy, and the Allied response in the Ardennes in World War II, and the UN Offensive and UN response to the first two Chinese Offensives in Korea, 1950. The campaigns are examined to determine if branches, sequels, and/or reserves were planned, the timing and extent of planning, if events caused those plans to be used, and the results. They are also analyzed in terms of the AirLand Battle tenets of agility, initiative, depth, and

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19. ABSTRACT

synchronization. Theoretical points, and contemporary professional views and doctrine are compared with the historical evidence to provide additional insights.

The monograph finds that planning branches, sequels, and the use of operational reserves is a critical factor in the success or failure of any campaign. Such planning, when it occurs, tends to be optimistic, focusing on opportunities rather than on assumptions of enemy success. The planning is most effective when done concurrently at multiple levels within the context of the operational commander's intent. Our doctrine requires more emphasis on the linkages of such planning to the normal planning process, the inclusion of branches and sequels in campaign plan formats, and the practical application of such planning.

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ABSTRACT

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I. INTRODUCTION

AirLand Battle doctrine introduced the operational level of war- the design and conduct of campaigns and major operations- to the U.S. Army. The heart of the operational level of war is the practice of operational art. Operational art begins with operational planning. FM 100-5, Operations, identifies branches, sequels, and the employment of operational reserves as important factors in operational planning. These preserve the commander's freedom of action and provide flexibility. They should embody the application of the AirLand Battle tenets of agility, initiative, depth, and synchronization. (29:27-31) But beyond recognizing their importance, our operational doctrine provides few additional insights. The linkage to basic plans, practical application, and effects of planning branches, sequels, and the use of operational reserves, are therefore fertile grounds that require more examination.

Clausewitz alludes to the need for the flexibility provided by branches, sequels, and reserves. He tells us that war is the realm of chance and uncertainty. (9:101) Because war is a test of wills, we can never know with precision how our own orders will be carried out or how the enemy will react. An infinite number of other factors which can never be fully weighed are also always at work. These factors combine to cause a friction which

virtually ensures, even if we could gain certainty, that events will not unfold as planned.

Clausewitz's solution to deal with such unknowns is a commander with genius. The embodiment of this genius is determination, "coup d'oeil," and presence of mind. Determination is required to overcome "the agonies of doubt and the perils of hesitation." (9:102) "Coup d'oeil" is an intuitive mental insight to quickly recognize "a truth that the mind would ordinarily miss or would perceive only after long study and reflection." (9:102) Presence of mind is an "increased capacity of dealing with the unexpected." (9:103) Unfortunately, we cannot rely solely on such genius. We must plan for and be prepared for the uncertain, chance occurrences, and the effects of friction. In effect, we must be able to plan for the unplannable.

This monograph is concerned with how to deal with chance, uncertainty, and friction in the domain of operational planning. Specifically, it addresses how branches, sequels, and planning for the employment of reserves enable the operational commander to achieve his objectives. Branches to a plan are "options for changing dispositions, orientation or direction of movement and accepting or declining battle." (29:30) Branches address uncertainty and chance before and during a battle or major operation. They aim at creating the best possible results or conditions. Sequels are based on those

results or conditions. They are actions after a battle.

Sequels

are based on possible outcomes- victory, defeat, or stalemate. They establish general dispositions, objectives, and missions for subordinate units after the battle. (29:31)

This paper reviews the theoretical and doctrinal basis for flexible planning. Several campaigns and major operations from World War II and the Korean War provide the basis for study. Specifically, operations in Sicily, in Normandy, in response to the German counteroffensive in the Ardennes, and in Korea from September to December, 1950, are examined. These campaigns and major operations are examined to determine if branches, sequels, and/or reserves were planned, the timing and extent of planning, if events caused those plans to be executed, and the results. The campaigns and major operations are also analyzed in terms of the AirLand Battle tenets of agility, initiative, depth, and synchronization. Theoretical points, contemporary professional views, and doctrine are compared with the historical evidence to provide additional insights. Conclusions, and their implications for U.S. doctrine, are then drawn from the historical and doctrinal analyses.

II. THE THEORY AND DOCTRINE OF BRANCHES, SEQUELS, AND RESERVES

Clausewitz based most of his analysis for his seminal work, On War, on the experiences of Frederick the Great and Napoleon. One of his major themes was his concept of military genius. Clausewitz believed Napoleon embodied this concept of military genius.

Napoleon dealt with chance, uncertainty, and friction by planning for flexible operations. When Napoleon said he never had a plan of operations, he was saying that rigid adherence to original plans is inadvisable. Success comes from a flexible mind that can adapt quickly and properly to a changing situation. (15:91) But such flexibility was not automatic, nor was it a product of only general plans. It was a product of planning for every possible eventuality. Napoleon prepared for adversity by always looking several months ahead to determine what he must do, and by looking for the worst. (15:105) He wrote:

A plan of campaign should anticipate everything which the enemy can do, and contain within itself the means of thwarting him. Plans of campaign may be infinitely modified according to the circumstances. (22:407)

This same prescription is offered in the context of being prepared for the unexpected on a daily basis as a battle or campaign unfolds.

A general should say to himself many times a day: If the hostile army were to make its appearance in front, on my right, or on my left, what should I do? And if he is embarrassed, his arrangements are bad;

there is something wrong; he must rectify his mistake. (22:410)

Napoleon was thinking in terms of branches and sequels.

He had learned from Bourcet that

Every plan of campaign ought to have several branches and to have been so well thought out that one or another of the said branches cannot fail of success. (21:95,330)

Liddell Hart expanded on this concept in his strategy of the indirect approach.

A plan, like a tree, must have branches- if it is to bear fruit. A plan with a single aim is apt to prove a barren pole. (21:330)

Liddell Hart viewed branches as paths to alternate objectives. The enemy cannot protect everything. By threatening several points, we force him to uncover at least one point. The key is following a line of operations, or developing a plan, which provides the opportunity to strike at the different points. Such a plan must take into account the enemy's options. It puts the enemy "on the horns of a dilemma." (21:330)

Liddell Hart also recognized the importance of sequels. He discussed sequels as one of eight axioms of the concentrated essence of strategy and tactics.

Ensure that both plan and dispositions are flexible-adaptable to circumstances. Your plan should foresee and provide for a next step in case of success or failure, or partial success- which is the most common case in war. Your dispositions (or formations) should be such as to allow this exploitation or adaption in the shortest possible time. (21:336)

Each battle, major operation, or campaign has a range of

possible outcomes, from victory, through stalemate, to defeat. Subsequent operations must be planned on the basis of those possible outcomes. In particular, the disposition of forces must anticipate future operations. This determines the support structure that often requires significant time to emplace before an operation, and cannot easily be reoriented.

U.S. Army doctrine incorporates these same principles. FM 100-6, Large Unit Operations, introduces the subject with Helmuth von Moltke's admonition "that no plan of operations can be projected with confidence much beyond the first encounter." (30:3-4) Good campaign plans provide such options for both the operation underway (branches), and the period after the coming battle (sequels). They provide flexibility, preserve the commander's freedom of action, and shorten the friendly decision cycle. (29:30-31) In the offense, they facilitate the characteristics of success of surprise, speed, and flexibility. (29:95-98) In the defense, they are essential to the characteristics of preparation and flexibility. (29:131-4)

The need to expect deviations and retain operational flexibility is more critical at the operational level than at the tactical level. Operational commanders make few decisions during an operation, but those they make are not easily changed and have far reaching consequences. The resources available are

unpredictable. Strategic decisions, ancillary operations, logistics constraints, enemy actions, and natural disasters all may affect the resources available. Branches and sequels impact on initial force disposition, compounding the problem. They must be carefully conceived and well understood to ensure smooth reorientation and avoid confusion. (30:3-4,5,7)

FM 101-5, Staff Organization and Operations, reiterates this and describes how branches may be developed. During the planning sequence when a course of action is selected, several feasible alternatives may be retained as branches. These are normally attached as annexes to the basic plan. (31:6-4)

Reserves are a critical component of effective branches and sequels. The principle of reserves is also based on the uncertainty of war. Clausewitz only recognized one purpose for reserves above the tactical level- to counter unforeseen threats. (9:193) According to our doctrine, in the offense reserves exploit success, maintain momentum, deal with unexpected enemy actions, secure deep objectives, or open the next phase of a campaign or operation. (29:106) In the defense they are the primary means to seize the initiative and preserve flexibility. (29:137) Reserves may be forces, fires, or logistics resources. They may be available at the start of a campaign or arrive during it. They may have to be drawn from economy of force portions of the theater.

(30:4-8,9) The operational commander rarely can afford to withhold significant reserves to prepare for unforeseen threats or opportunities. Typically, he must rely on the shifting of forces from less critical or less threatened areas. (30:3-4) The success of such operations depends on advance preparations based on planned branches or sequels.

AirLand Battle doctrine links branches, sequels, and reserves to the tenets of agility, initiative, depth, and synchronization. It states that success on the battlefield depends on fighting in accordance with these tenets. Agility is "the ability of friendly forces to act faster than the enemy." (29:16) Planning branches and sequels prepares friendly forces to act faster when conditions change. Such planning shortens the decision cycle. This contributes to agility. It is necessary to seize and hold the initiative.

Initiative "means setting or changing the terms of battle by action." (29:15) Initiative involves a battle over freedom of action- retaining our own while denying the enemy his. A prime purpose of branches and sequels is to maintain the advantage of freedom of action.

Depth "is the extension of operations in space, time, and resources." (29:16) Sequels create depth. With branches, they add the dimension to depth that a basic plan cannot provide.

Synchronization is

the arrangement of battlefield activities in time, space, and purpose to produce maximum relative combat power at the decisive point. (29:17)

Synchronization is directly linked to depth. It is the direct result of planning. While synchronization may be achieved through the basic plan, it will be lost when changes occur unless all forces fully understand the commander's intent and have planned the alternative actions.

The proper planning of branches, sequels, and reserves should adhere to these tenets and contribute to success. Four campaigns will provide us a look at that interaction.

III. HISTORICAL SURVEY OF SELECTED CAMPAIGNS AND MAJOR OPERATIONS

SICILY

Planning began for Operation HUSKY in February, 1943. Early planning was indecisive because the available troops could not be determined given continued fighting in Tunisia and strategic demands elsewhere. (14:161) Multiple centers of planning further complicated the effort. General Eisenhower, in Algiers, was loosely in charge of a committee of four. General Alexander, his ground force commander, was preoccupied with Tunisia. Admiral Cunningham, naval force commander, was in Malta. Air Chief Marshal Tedder was primarily concerned with air supremacy, instead of ground support to the operation. (12:71-74;4:223)

The plan went through several quite varied iterations. By March a tentative plan of assault by echelon was developed. This involved sequential landings in the southeast, south and north, with each landing providing air cover for the next landing. The plan was complex and risked defeat in detail. (14:163)

It devolved to General Montgomery, with General Patton one of the army commanders under Alexander, to devise the final plan. The plan had the British making the main effort with an assault between Syracuse and Pozzallo, followed by a drive up the east coast to the key objective of Messina. Patton was to land in the

south from Pozzallo to Licata, seize critical airfields, and protect Montgomery's left flank. (12:121-2,144-150) Beyond this, no envelopment or decisive victory was specifically contemplated. No overall master campaign plan was prepared. (12:524,321)

While this planning was proceeding, General Marshall, Army Chief of Staff, suggested Eisenhower look beyond Sicily. Eisenhower examined three sequels: (1) if the enemy collapsed quickly in Sicily, he would immediately undertake operations on the Italian mainland; (2) if the enemy offered prolonged resistance, the Allies would have no resources available for further operations and the entire Mediterranean campaign would have to be relooked; (3) if operations went according to plan against stubborn resistance that could be overcome by mid-August, the decision would still have to be deferred. (4:213) In effect, the only sequel developed was for sudden enemy collapse.

The landings commenced on 10 July, preceded by airborne drops, along the 100 mile front. Initial progress was good, but by 13 July Montgomery was held up below Catania. Beyond Catania was Mt. Etna, a significant obstacle barring the eastern approaches to Messina. To facilitate his advance, Montgomery requested a boundary shift to give him the Vizzini-Caltagirone highway. At the time, Patton's army was in position to quickly bypass resistance and cut off the bulk of the

German forces. Sticking to the original plan, Alexander refused to switch the main effort and gave the road to Montgomery. (12:326-7,557) It did no good. The Germans still held Montgomery before Mt. Etna. Meanwhile, Patton drove rapidly around the western end of the island, reaching Palermo by 22 July. The Germans were merely pushed back towards Messina. By 11 August, the Germans began evacuating across the Messina Straits. Most of their army was saved by the time the Allies entered Messina on 17 August.

The 60,000 Germans achieved a moral victory, opposing 500,000 Allied troops with complete air and naval supremacy for thirty-eight days, while saving most of their army. (1:231) It took until 3 September, ten days longer than Eisenhower expected, before the Allies put troops across the Straits as a sequel to HUSKY. (14:184)

Critics felt that landings should have been made closer to Messina to cut off the Germans and achieve a decisive victory. Afterwards, Eisenhower himself felt he should have landed on both sides of the Strait, cutting off Sicily and gaining an early toehold in Italy. But Eisenhower played an insignificant role in the development of the campaign. Political and diplomatic problems preoccupied him. (1:226-7) Nonetheless, had Eisenhower and his service chiefs agreed on a plan as late as mid-July, when the success of the landings was already assured, sufficient time and resources were still

available to conduct operations in the vicinity of Messina, but no branches were developed. (12:547)

Finally, the air and naval commanders could have greatly diminished the German evacuation. A coordinated air-naval offensive could have crippled the evacuation fleet and/or seal the approach routes. From 4 August on, Tedder and Cunningham discussed such actions, but no focused, coordinated effort was attempted. The story of Sicily was "far too much discussion and too little action." (12:532)

Normandy

The objective of Operation OVERLORD contained in the Combined Chiefs of Staff (CCS) order to the Supreme Commander, General Eisenhower, was clear, concise, and simple:

You will enter the continent of Europe and, in conjunction with the other Allied Nations, undertake operations aimed at the heart of Germany and the destruction of her Armed Forces. (14:225)

Like HUSKY, Operation OVERLORD went through many iterations, but unlike HUSKY, the planning was a coordinated and focused effort. The final plan was for British and Canadian forces to land on the east (left) flank and push south-southeast. U.S. forces on the right were to push south and northwest to capture Cherbourg. Then the U.S. forces would turn west to take Brittany simultaneous with a drive south to the Loire. At this point the entire Allied force would have to turn east to

secure the Seine, the ultimate objective of the Normandy campaign. This completed the first two phases of Eisenhower's seven phased campaign for the defeat of Germany. The early capture of Caen, planned for D-day, was seen as critical. It provided access to the vital Caen-Falaise heights that were to serve as the hinge for the turn east. The main effort was the British sector. (13:72-78;14:228-9) A pause was anticipated to regroup and refit upon reaching the Seine. In that context, the capture of the Brittany ports, and if possible those on the lower Seine, was essential. (1:471)

The main objective of getting ashore on 6 June was completely successful. But neither of the D-day objectives of Bayeux nor Caen were seized. The immediate concern was to link up the U.S. beachheads. The longer concern was to become the capture of Caen. (23:171-3)

Montgomery directed repeated attacks to seize Caen from 7-10 June, but each was unsuccessful. While no alternate plans for the capture of Caen were developed at 21st Army Group (21st AG), Montgomery's headquarters, General Dempsey's staff at 2d (BR) Army planned such contingencies for the airborne reserve. Operation WILDOATS envisioned an airborne drop vicinity Evrecy and Noyers on D+6/7 to isolate Caen. But ground progress was insufficient to ensure linkup and the operation was cancelled. Towards mid-June, repeated failures led Montgomery to containment in the east and a shifting of

effort to the west. (13:164-170,209)

Exactly when and how this change occurred is questionable. On 11 June, Montgomery said his intent was "to pull the enemy on to 2d Army so as to make it easier for 1st Army to expand and extend the quicker" to Cherbourg. (1:428) Yet his directive of 18 June stated

It is clear that we must now capture Caen and Cherbourg, as the first step in the full development of our plans. Caen is really the key to Cherbourg. (14:260)

Clearly, by early July the plan had changed. Cherbourg was captured on 26 June and the peninsula cleared by 1 July. On 8 July, Montgomery outlined his intentions to Eisenhower: it was vital to 1) get Brittany, 2) get elbow room, and 3) engage the enemy in battle- where did not matter, provided 1 and 2 were met. Montgomery still wanted Caen, but now felt it was best to continue to draw enemy reserves to the British and ease the 1st (US) Army's drive south. (23:181-6) Revised plans were independently starting to come together from army level to the Supreme Headquarters (SHAEF).

Less than two weeks after the invasion, planners at SHAEF and 21st AG outlined plans for exploiting a deterioration in the German capacity to resist. The Plan B variant of Operation LUCKY STRIKE envisioned insignificant enemy in Brittany and an open flank south of the Loire. This variant provided for minimum forces in Brittany, and the bulk of Patton's 3rd Army (which was

to be activated 1 August to take Brittany) to exploit along the Loire and block the Paris-Orleans gap.

(13:345-6;23:196) (LUCKY STRIKE was only one of many branches developed. BENEFICIARY and HANDS UP were other breakout branches consisting of combined airborne-amphibious attacks on St. Malo and Quiberon Bay, respectively.) (23:197,554)

At the same time, General Bradley's 1st (US) Army's staff and Dempsey's staff were developing new plans to breakout of the beachhead. These were, respectively, COBRA and GOODWOOD. Both were approved and coordinated by mid-July. GOODWOOD was to breakthrough to Falaise starting 18 July. COBRA was scheduled to breakthrough at St. Lo and exploit towards Coutances on 25 July. Both were to be preceded by intensive saturation bombing, a plan suggested by the air staff. (23:197;13:229,337-42)

While GOODWOOD met stiff resistance, Bradley's forces achieved a decisive breakthrough. By 2 August strong U.S. forces were in the enemy rear with many options. It was a "golden opportunity" to execute LUCKY STRIKE Plan B. Patton was directed to detach only one corps to Brittany, and turn east with the remainder of his army towards the Seine. (1:469) On 6 August the Germans counterattacked against the narrow neck of the breakthrough on the Mortain-Avranches axis. The Allies viewed this as another opportunity. While the air forces smashed the Germans, Allied commanders looked at a "short

hook" encircling the enemy between Mortain and Falaise, instead of a "long hook" focused on the Seine crossings. As Patton was redirected northeast, Montgomery launched his sequels to GOODWOOD. (13:418-25)

As operations unfolded to close the Falaise pocket, commanders continued to be prepared to execute the "long hook." Airborne planners developed several plans (Operation TRANSFIGURE) to cut off the Paris-Orleans gap and Seine crossings. On 15 August, Eisenhower had to cancel these plans so the airlift could carry gas to the lead units. (23:209-10) Patton had reached Argentan on 12 August and was held at the boundary with 21st AG while the Canadians were still several miles short of closing the gap. Bradley oriented Patton further east. He and Eisenhower were looking for the wider encirclement. Unfortunately, this allowed many Germans to escape, though without equipment. On 15 August Montgomery shifted the boundary and the gap was closed at Chambois on 19 August. (13:430,445)

As units reduced the Falaise pocket, Eisenhower reviewed sequels to the Normandy campaign. DRAGOON had gone off well on 15 August, but Brest had not been taken in Brittany. The Allies needed ports and Antwerp was the next principle objective, in accordance with the original general plan of campaign against Germany.

Ardennes

During early December Bradley's 12th AG was preparing two attacks: 1st (US) Army in the north to seize the Roer Dams, and 3rd (US) Army in the Saar to the south. Between them lay the badly stretched forces of VIII Corps in the Ardennes. While the staffs monitored this situation, Eisenhower and Bradley met various times to discuss the thin VIII Corps line. A decision was made to accept risk in the Ardennes. The possibility of a German counteroffensive was recognized, but it was considered a mistake to curtail offensive plans and give up the initiative. The risks were carefully weighed. The coming 12th AG offenses were immediately north and south of the Ardennes, putting the Allies in a good position to concentrate against the flanks of any penetration. Bradley estimated the enemy would need to capture supply depots to sustain any attack. He traced a line just short of the Meuse where he thought the Germans could reach. He removed all but a few supply installations from that area of potential German penetration.

(14:337-8) Plans existed to move forces from 3rd (US) and 9th (US) Armies in the event of a threat. (10:332)

That threat materialized on 16 December as the forces of two German armies struck the VIII Corps. Eisenhower and Bradley were in conference when word arrived of the attack. Eisenhower immediately recognized the significance. In the north 1st (US) Army only had four

divisions engaged against the dams, and Patton was still concentrating in the south. Each flank had an uncommitted armored division, 7 AD in the north and 10 AD in the south. Bradley sent both to the Ardennes and alerted his army commanders to be prepared to send more forces. (14:342-44) On his own initiative, General Simpson, commander, 9th (US) Army, offered the 30 ID and 5 AD. (10:333)

Eisenhower's biggest problem was the lack of a strategic reserve. SHAEF had been trying to locate enough forces to form a reserve corps since 20 November. (23:374) SHAEF planners had submitted a plan calling for such a reserve only two days prior to the German attack. On 16 December, Eisenhower had only the XVIII Abn Corps (82 Abn and 101 Abn Divs) immediately available. On the 17th it was directed to Bastogne. He began accelerating the movement of several other divisions in France and the UK to concentrate around the Ardennes. This provided six additional divisions over the next couple weeks. (14:344;10:334)

Eisenhower then met with his commanders at Verdun on 19 December. Two priorities were set: to hold the shoulders of the penetration and to avoid the piecemeal commitment of reserves. (14:344-5) A plan was decided to hold in the north and conduct a limited attack led by Patton's forces from the south. The axis would be Arlon-Bastogne, and on order continue to St. Vith. (10:510)

Far to the north, Montgomery redirected his AG reserve, 30 Corps, to the area between Liege and Brussels. (10:557) By 20 December it was apparent that Bradley could not maintain contact with 1st (US) and 9th (US) Armies, so Eisenhower shifted the army group boundary south, giving those forces to Montgomery. (23:378)

On 23 December the weather cleared, releasing the air forces to strike against the concentrated Germans. On 28 December Eisenhower met with Montgomery to coordinate the offensive against the Bulge from the north. Throughout this period, there was no letup in planning for the resumption of the general offensive into Germany. Plans were forwarded for operations to close all along the Rhine on 31 December, three days before Montgomery launched his attack into the Bulge. When the 1st (US) and 3rd (US) Armies linked up at Houffalize and turned east on 16 January, plans were already in place to cross the Rhine. (14:362-4) The Allies had planned, at least informally, to meet the German counteroffensive, and then reacted with agility to regain the initiative and defeat it. Eisenhower saw a similarity with the German counterattack at Mortain. He said:

In both cases our long-term calculations proved correct but [in the Ardennes] the German achieved temporary success, while at Mortain he was repulsed immediately. (14:276)

Korea

General MacArthur had decided on an amphibious operation to defeat the North Koreans as early as 2 July, before the first American contact at Osan. A series of plans, Operation BLUEHEARTS, was developed by his special plans group, the Joint Strategic Plans and Operations Group (JSPOG). This group, under MacArthur's G-3, MG Wright, conducted operational planning under MacArthur's direction throughout 1950. As efforts failed to halt the North Koreans, MacArthur cancelled BLUEHEARTS, but his planning group continued to focus on an amphibious envelopment. (26:139-40)

Eventually three detailed alternate plans were drawn up for what evolved into Operation CHROMITE, the amphibious envelopment at Inchon: 100-B at Inchon, 100-C at Kunsan, and 100-D at Chumunjin on the east coast. Additional alternates at Wonsan and Chinnampo were under consideration. MacArthur decided on mid-September as D-day and, despite continued enemy success in Korea and the lack of available troops, he stood firm with that date. (26:142-44)

As late as 12 August, when 15 September was firmly fixed as D-day, units could not be named for the operation. MacArthur designated the GHQ Reserve (the 7 ID which was at half strength in Japan) and the 1 Mar Div, which only had two regiments, one of which had already been committed to Pusan. (26:146) Operations

were immediately set in motion to bring the 7 ID up to strength and complete the 1 Mar Div. (3:491-2) At no time during planning did MacArthur have the required forces. He planned based on "hope, credit, and promises." (26:155)

Though concerned about enemy successes, the JCS approved MacArthur's final plan with a suggestion that he also prepare alternate plans for a landing at Kunsan. The final plan ordered X Corps to land at Inchon to seize Kimpo Airfield and Seoul, and sever all North Korean lines of communication. Eighth Army was to make a coordinated attack on D+1 to destroy enemy forces. The principle air effort supported Eighth Army. (26:151-2)

Meanwhile, JCS concerns continued. They notified MacArthur that no more reserves were available to reinforce Pusan and that he should reconsider the plan. MacArthur believed the Inchon operation was the only hope of seizing the initiative from the enemy. He responded:

There is no question in my mind as to the feasibility of the operation There is no slightest possibility of our forces being ejected from the Pusan beachhead. (26:153)

The JCS asked what his plans were for failure. He responded that he would be on sight to immediately withdraw the forces if it turned out that his estimates were wrong, then concluded "But Inchon will not fail. Inchon will succeed." (19:470) In response to JCS concerns about Eighth Army's ability to breakout and

linkup, MacArthur replied that success was not dependent on rapid joining. Both forces would be self-sustaining and, regardless, the X Corps operation would cause the complete dislocation of the enemy. (26:153-4)

Events were to dramatically justify MacArthur's optimism. Only Eighth Army's initial struggle caused concern. After three days of indecision along the perimeter, MacArthur directed the alternate landing at Kunsan be executed using three divisions withdrawn from the perimeter. General Walker objected, given the tough situation he was already in. Events overtook the decision as by 23 September the enemy felt the effects of Inchon and began to collapse. Eighth Army linked up with X Corps vicinity Osan on 26 September. (26:176-7)

That same day MacArthur directed JSPOG to plan another amphibious encirclement north of the 38th Parallel. The concept called for Eighth Army to attack north towards the North Korean capital of Pyongyang while X Corps landed at Wonsan and encircled the capital by attacking west. (3:609-10)

The next day, 27 September, JCS revised MacArthur's direction, authorizing him to enter North Korea:

Your military object is the destruction of the North Korean Armed Forces...you are authorized to conduct military operations...north of the 38th Parallel...as a matter of policy, no non-Korean Ground Forces will be used in the provinces (along the)...border.
(26:182)

Swift advances by Eighth Army and the ROK forces in

the east caused MacArthur's plans to be constantly revised. On 9 October, the day U.S. troops crossed the 38th Parallel, the JCS sent MacArthur another directive about possible Chinese Communist intervention. This directive essentially left actions, given such intervention, up to MacArthur's judgment. (26:200)

When the ROKs captured Wonsan and transfer delays and mines in the harbor delayed the X Corps landing, MacArthur briefly looked at sending the Corps further north. Lack of time and the complexities involved in the switch led him to stay with the Wonsan landing. But he did reorient their ground attack north, since a drive to Pyongyang was no longer necessary. In the later half of October, the JSPOG focused on plans for the withdrawal of forces from Korea, the logistics standdown, and the transition to Korean government. (26:222)

Then, on 26 October the Chinese struck Eighth Army, collapsing the ROK II Corps and forcing a temporary withdrawal. Chinese intervention was taken seriously in Washington where they caused a swift reversal of plans to reduce support to Korea. MacArthur requested more forces and permission to interdict the Yalu bridges. But otherwise, the temporary setback did not cause him to alter his plans. (26:257)

The JSPOG reviewed plans from a standpoint of how X Corps could best assist Eighth Army. They concluded a redirection of X Corps advance to the northwest would

threaten the rear of the Chinese facing Eighth Army. But first it was necessary to eliminate the enemy in the Changjin Reservoir area. (26:260-61) Eighth Army was directed to resume its attack north on 24 November and X Corps would begin attacking three days later.

The Eighth Army attack started against light to moderate resistance. Then the next day the Chinese hit in force, causing Eighth Army to reel back. At the same time Chinese forces hit the strung out elements of X Corps. MacArthur's response, in his 28 November message to the JCS, showed he was beyond consideration of branches or sequels:

We face an entirely new war...It is quite evident that our present strength of force is not sufficient...The resulting situation (is)...beyond the sphere of decision by the theater commander.
(2:245)

Limited attempts were made to establish a defensive line, but resigned to the conditions of "an entirely new war," withdrawal was the only operation seriously considered. Eighth Army withdrew faster than the Chinese could advance until a line was eventually established south of the 38th Parallel. (2:441-3) X Corps had to be evacuated by sea. It was not a planned sequel to the advance to the Yalu.

IV. ANALYSIS OF THE ROLES OF BRANCHES, SEQUELS, AND RESERVES

The four campaigns examined provide good combinations of both the possible roles and proper use of planning branches, sequels, and the employment of reserves. Sicily and Normandy were cases of opportunity. In Sicily, the lack of good planning cost the Allies the opportunity for a decisive victory. In Normandy, thorough planning contributed to significant success. The Ardennes and Korea were cases of response to potential disaster. Planning again led to success in the Ardennes. In Korea, deficiencies in planning contributed to the magnitude of eventual failure. Together, these campaigns are analyzed according to their planning and use of branches, sequels, and reserves, and the contribution of such planning to agility, initiative, depth, and synchronization.

Branches

Branches were considered to some extent in each of the campaigns. However, they were only formally planned in advance in Normandy and Korea. They were developed during operations in the Ardennes and Sicily. Results were effective in Normandy and the Ardennes. They were not in Sicily and Korea.

The continuous planning and execution of branches characterized the Normandy campaign. Planners at all levels focused on how to achieve and take advantage of

the breakout. Disposition, orientation, and directions of advance were changed to create and exploit success. These branches were all linked by the Supreme Commander's intent- his concept of operations for the defeat of Germany. In response to the post war criticisms that the plan for Normandy did not work and had to be changed, Eisenhower wrote a passage that adeptly summarized good planning in terms fitting AirLand Battle doctrine today:

There is a vast difference between a definite plan of battle or campaign and the hoped-for eventual results of the operation.... there are certain minimum objectives to be attained, else the operation is a failure. Beyond this lies the realm of hope- all that might happen [with fortune]. A battle plan attempts to provide guidance even into this final area, so that no opportunity for extensive exploitation may be lost through ignorance... concerning the intent of the commander. These phases of the plan do not comprise rigid instructions, they are merely guideposts. A sound battle plan provides flexibility in both space and time to meet the constantly changing factors of the battle problem in such a way as to achieve the final goal.... Rigidity inevitably defeats itself, and the analysts who point to a changed detail as evidence of a plan's weakness are completely unaware of the characteristics of the battlefield. (14:256)

Such flexibility was singularly missing in Sicily and Korea. In Sicily, operational freedom of action and flexibility were forfeited by the complete lack of branches. In Korea, MacArthur's narrow focus on specific amphibious envelopments and an independent role for X Corps imposed constraints on his freedom of action and flexibility.

The timing and extent of planning branches varied significantly between campaigns. Such planning was most

thorough, and consequently most useful, before and during Normandy. It was most haphazard, with attendant missed opportunities, in Sicily. Events overcame numerous branches in both Normandy and Korea. Eisenhower's and MacArthur's staffs planned several airborne operations that could not be executed because ground units advanced too fast or too slow to fit the plans. This also applied to some amphibious branches. These events indicated insufficient time was available to plan, prepare, and execute such branches from scratch during high tempo operations. Part of the value of branches existed in the work done before the tempo increased. After the tempo increased, it was often too late to start revising plans. At that point the agility of lower units, as exhibited by Patton in Normandy and several commanders in the Ardennes, became critical.

The headquarters that planned branches also varied significantly between the campaigns. A synergistic effect resulted in Normandy from the simultaneous planning of supporting options at Army, Army Group, and SHAEF levels. Conversely, the JSPOG planned almost all branches in Korea. On the occasions that Walker submitted independent plans, he was overruled. Synergistic planning at multiple levels also contributed to success in the Ardennes. Besides Patton's well known preparations to turn north, Simpson and Montgomery also redirected forces on their own initiatives.

Air and/or naval forces could have contributed significantly to branches in all the campaigns. The Allies and UN forces had complete air and naval supremacy. The amphibious capability available at Sicily, Normandy, and Korea provided the commanders almost unlimited opportunity for branches. J.F.C. Fuller observed:

The fact remains that the most economical solution was seaborne attack, because in coastal operations he who commands the sea can nearly always find an open flank leading to the enemy's rear- the decisive point in every battle. This was the lesson of the Sicilian campaign, and it was not learnt. (12:564)

None of the campaigns maximized this capability. In Normandy, the planned options (e.g. BENEFICIARY and HANDS UP) became unnecessary after the breakout. Kunsan and Wonsan both became unnecessary in Korea, but Wonsan was still executed. Naval forces were, however, key in the later evacuation of X Corps. In Sicily, there were numerous opportunities to use this capability, but as already observed, no branches were developed.

Sequels

The operational commanders planned sequels in each of the campaigns. The extent of planning directly affected subsequent operations. In both Sicily and Korea, the commanders only considered the most optimistic sequel. Unfortunately, that was not the outcome in either theater.

Eisenhower had only decided on a sequel to Sicily if

success was rapid. The slow progress left the Allies without firm direction as to what to do after taking Messina. Consequently, the assault on Italy did not immediately follow Sicily. In the case of Sicily, the lack of an Allied strategy for the role of Sicily and the direction of future operations complicated the planning of any sequel. (12:552)

MacArthur expected, and was only prepared for, complete victory. Even given surprise by the Chinese, the UN forces would have been much better prepared to meet the Chinese onslaught had they planned feasible sequels for intervention. The JCS recognized this, but failed to direct MacArthur to take action. (2:403)

Reserves

Significant reserves were not on hand in any of the operations, but they were available in some fashion in each. Arriving forces constituted the commanders' primary source of reserves in both Sicily and Normandy. Such forces played a significant part in the Normandy campaign. One of Eisenhower's main preoccupations was sequencing and facilitating the arrival of new units in Normandy so his ground commanders could best fight the battle. (23:198) Though forces were available for Sicily, they merely reinforced the landings, irrespective of the situation as it developed. More than enough forces were available, but no efforts were made to use them other than originally allocated. In both the

Ardennes and Korea, reserves had to be created primarily by shifting forces within the theater. Eisenhower was successful by going on the defensive and using the principle of economy of force. MacArthur tried to do too much with too little and found himself constantly without adequate forces. Even at Inchon, where he relied on both arriving forces and units pulled from the Pusan perimeter, MacArthur had just enough forces to execute his operation.

Air forces played a dual role. They were used in the context of a reserve to deal with unexpected threats, and their effort was shifted as a kind of air branch to the plan. Eisenhower recognized the necessity for the operational commander to control this potent force. He insisted on it at Normandy, a lesson learned from the Mediterranean Theater:

When battle needs the last ounce of available force, the commander must not be in the position of depending upon requests and negotiation to get it. It was vital that the entire sum of our assault power, including the two Strategic Air Forces, be available for use during the critical stages of the attack. (14:222)

In some of the campaigns the commanders had perhaps too much faith in the capability of air power. MacArthur felt the air could stop the Chinese, and that no doubt influenced his failure to plan other options for Chinese intervention. In a conversation with Ambassador Muccio in mid-November, 1950, MacArthur stated that the Air Forces could detect and interdict any Chinese attempt at

intervention. (19:528) On the eve of the renewed UN offensive he reaffirmed:

My air force for the past three weeks,... successfully interdicted enemy lines of support from the north so that further reinforcement therefrom has been sharply curtailed and essential supplies markedly limited. (26:277-8)

Two days later, over a quarter million Chinese attacked the UN forces.

Sicily was perhaps the one campaign where airpower was underutilize_ and could have significantly altered the outcome. The air forces gained air supremacy, but then did little with it. When the German evacuation of Sicily called for branches or the use of reserves to prevent their escape, "the air forces never made anything resembling an all-out effort" to stop them. (12:535)

AirLand Battle Tenets

The campaigns in which branches, sequels, and the use of reserves were effectively planned were also the campaigns characterized by agility, initiative, depth, and synchronization.

The Allies acted faster than the Germans in Normandy and the Ardennes because of several factors, of which air interdiction was a significant one, but the planning of branches was clearly a contributing factor. The planning of sequels for both these campaigns also facilitated a continued Allied edge in agility for subsequent operations across France and the Rhine, respectively. In Sicily, the Germans blocked the approaches to Messina and

then evacuated the bulk of their forces primarily because the Allies failed to demonstrate agility in the planning and execution of branches to cut off the Germans. The lack of branches, a feasible sequel, and adequate reserves by the UN in Korea enabled the relatively slow Chinese armies to act faster than the UN forces. Fortunately, the tactical agility of Eighth Army and X Corps units enabled them to eventually withdraw and reestablish a defensive line again in South Korea.

The Allies maintained the initiative in Normandy, and quickly seized it in the Ardennes due to agility and comprehensive planning. Though the Germans upset the early Normandy timetable and stopped repeated attempts to breakout of the lodgement, the Allies continually adjusted and shifted efforts quicker than the Germans could meet them. When the breakout occurred south of St. Lo, the Allies were prepared to exploit it before the Germans could effectively react. The counterattack at Mortain was too little and too late. The Allies were prepared to defeat it with concentrated air power while continuing the exploitation. In the Ardennes, the Allies quickly set the terms of battle, despite being initially surprised. Planning, and the resulting quick movement of forces into the Ardennes, contained the German thrust. In a matter of days, the Germans had lost the initiative and were reacting to Allied concentrations at St. Vith and Bastogne.

The lack of anticipation and planning ahead contributed to the loss of initiative in Sicily and Korea. Despite an overwhelming force disadvantage, in Sicily the Germans set the terms for an effective delay and retained the freedom of action to evacuate their army. They did this because the Allies failed to use their amphibious and air capabilities to seize the initiative. The Chinese seized the initiative in Korea because of the ineffectiveness of intelligence and air power to detect and interdict them, and the lack of any feasible branches, sequels, or reserves to deal with intervention.

When they were planned, branches and sequels both added depth to operations. They extended the Normandy campaign south to the Loire and east to the Seine. Branches employed all available resources, while sequels maintained a unity of purpose oriented on the Rhine and beyond. As units arrived on the continent, such as Patton's 3rd (US) Army, they were immediately and effectively employed. In the Ardennes, branches and reserves ensured the depth of Allied defenses exceeded the range of German offensive capability. Then, planned sequels carried the battle east across the Rhine, taking advantage of the weakened German defenses resulting from the culmination of the Ardennes counteroffensive. From the Allied perspective, reserves extended the Ardennes battle back to England, and south to the Colmar pocket.

Depth was missing in Sicily specifically due to the lack of branches and sequels. Operations were essentially confined to the tactical depth forward of Patton's and Montgomery's armies. Neither space: Messina, the Messina Strait, and the toe of Italy; nor time: operations after the advance stalled and after Messina was captured; nor resources: air, naval, and reserve ground forces; were extended by planning or actions.

Finally, synchronization was a product of detailed planning. It was achieved initially in all the campaigns. It broke down in Sicily and Korea when circumstances changed and plans did not exist to deal with the changes. It was maintained in Normandy and the Ardennes in part because commanders planned for multiple possibilities. This is perhaps the most important contribution of branches, sequels, and planning for reserves: such planning facilitates synchronization when the circumstances of battle significantly change.

V. CONCLUSIONS

Several conclusions can be drawn from the preceding analysis. They concern the characteristics, tendencies, and effectiveness of various approaches to planning branches, sequels, and the use of reserves.

Branches and sequels can take many forms. The most formal sense is that mentioned in FM 101-5 where they are alternate courses of action that are fully developed and appended to the plan as annexes. These could be called explicit branches or sequels. Operations LUCKY STRIKE, BENEFICIARY, HANDS UP, and TRANSFIGURE in Normandy and the Kunsan branch in Korea fall into this category. They can also be more informal, or implicit. The response in the Ardennes falls into this category. Explicit plans did not exist to counter a German offensive, but the commanders considered the possibilities; made the time, distance, and force calculations; and at least conveyed their intent should such an attack occur.

Ideally, formal branches are prepared for all feasible options and sequels are prepared for the standard win, lose or draw possibilities. However, time, circumstances, or the conflicting demands of ongoing or future operations may preclude thorough planning of branches and sequels. These are the occasions when at least implicit branches or sequels should be planned to supplement any formal plans. Since the initial

disposition of forces may limit the possible courses of action, given the relative immobility of support structures, examination of the limits imposed by the initial disposition of troops should at a minimum be done. When this was done in the Ardennes, Eisenhower and Bradley knew they could reorient the necessary forces from the flanks. If MacArthur had done this after the Wonsan landing, he would have seen that neither X Corps, nor Eighth Army, could be reoriented to help the other should the necessity exist.

All the campaigns studied showed an almost universal tendency to focus optimistically on opportunities in planning branches and sequels. Although this was a reflection of an offensive orientation and possession of the initiative in all the campaigns, it left commanders less prepared for enemy attempts to seize the initiative. The campaigns examined demonstrated the potential cost of failing to plan for the worst case, as in Korea, far exceeded the lost opportunities from not planning for better cases. Given that in none of the campaigns did the commanders formally prepare branches or sequels for a loss or worst case scenario, that doctrinal guidance needs to be reviewed. Either informal, implicit plans are satisfactory, or increased emphasis is required to ensure those cases are adequately addressed.

The planning and execution of branches and sequels was most effective when it was done at multiple levels.

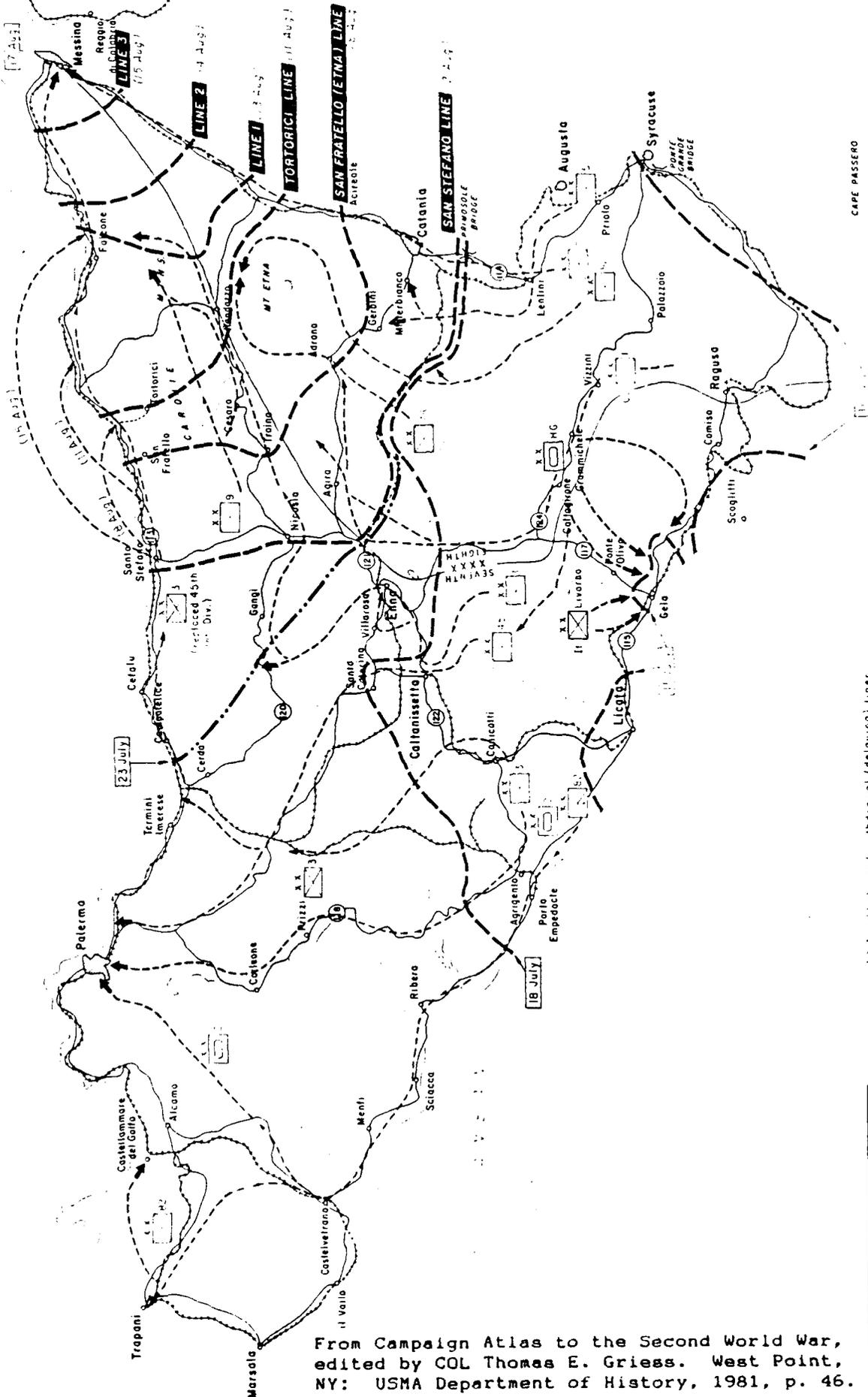
It was least effective when planning was centralized at one level. The commander's intent provides an important linkage in branches and sequels just as it does in primary operations. The Normandy campaign best demonstrated the synergism of simultaneous planning. The lower levels, closest to the action, were able to develop plans that seized and exploited opportunities in their areas. The higher command levels ensured these plans supported each other and maintained the long term focus.

Warfare is joint by nature at the operational level. The biggest weakness in planning in the campaigns examined derived from problems in joint planning. Air and naval forces add significant capabilities that must be fully incorporated in planning branches and sequels. That was rarely done in the examples. Consequently, air and/or naval forces were not maximized after the initial plan was executed.

Finally, as stated in FM 100-6, the operational commander can rarely afford to maintain large reserves. As demonstrated in the four campaigns, he must normally rely on shifting forces within the theater or the scheduled arrival of new forces. This complicates planning. A reserve headquarters, even if it has little or no units assigned, can contribute to planning options. The most common instance of this during World War II was the use of XVIII Abn Corps to plan multiple airborne contingencies while SHAEF reserve.

Though FM 100-5 and other manuals clearly state the importance of planning branches, sequels, and the employment of reserves, the concepts require more emphasis. Branches and sequels only receive a brief comment in FM 101-5. They are not even mentioned in connection with the numerous campaign plan formats provided in such manuals as FM 100-6 (coordinating draft) or the Mendel-Banks report on Campaign Planning. The discussion in FM 100-5 is also brief. Given that the normal course of war virtually ensures that branches and sequels will be a part of every major operation or campaign, they should receive more study. Planners need to know what works effectively, what must be considered, and how best to plan for the unplannable.

Italians evacuated 3-16 Aug
and Germans on 11-17 Aug
Executed primarily at night



--- (2 Aug) planned withdrawal (delaying) lines
--- (11-17 Aug) actual stages of advance

SICILY, 1943
ITALO-GERMAN COUNTERATTACK, 11 JULY AND ALLIED ADVANCE, 12 JULY-17 AUGUST 1943

ELEVATIONS IN METERS
 0 500 1000 2000 3000
 0 5 10 20
 SCALE OF MILES

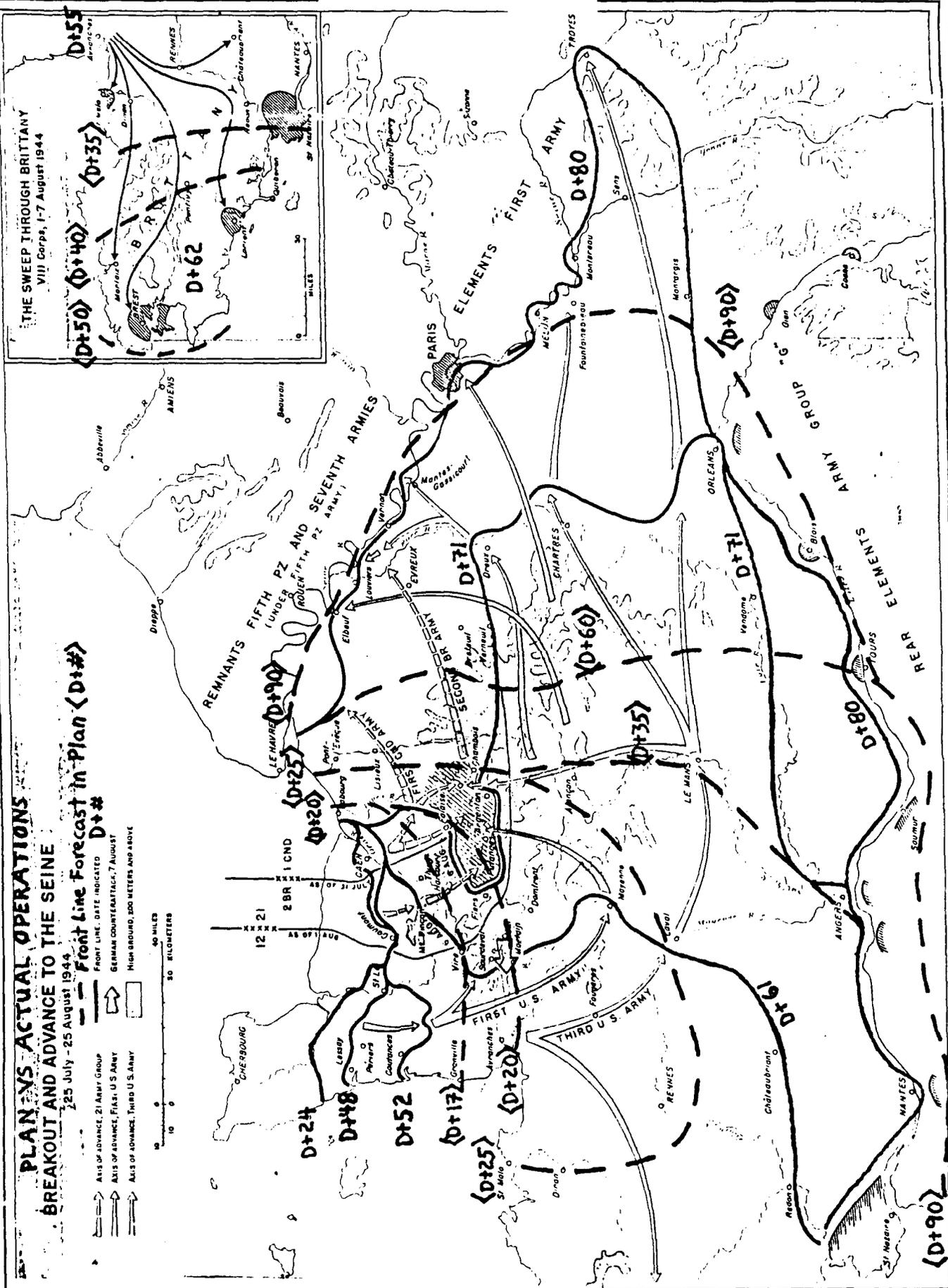
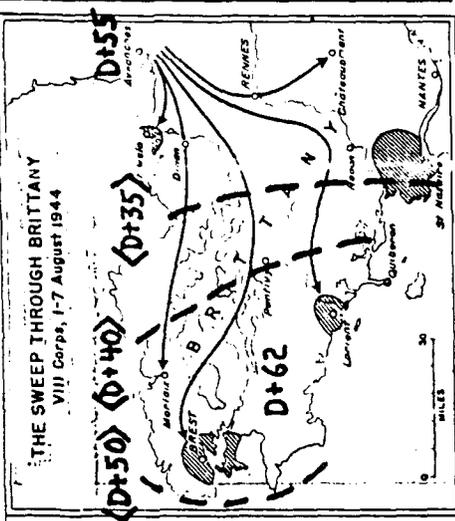
PLAN VS ACTUAL OPERATIONS

BREAKOUT AND ADVANCE TO THE SEINE

25 July - 25 August 1944

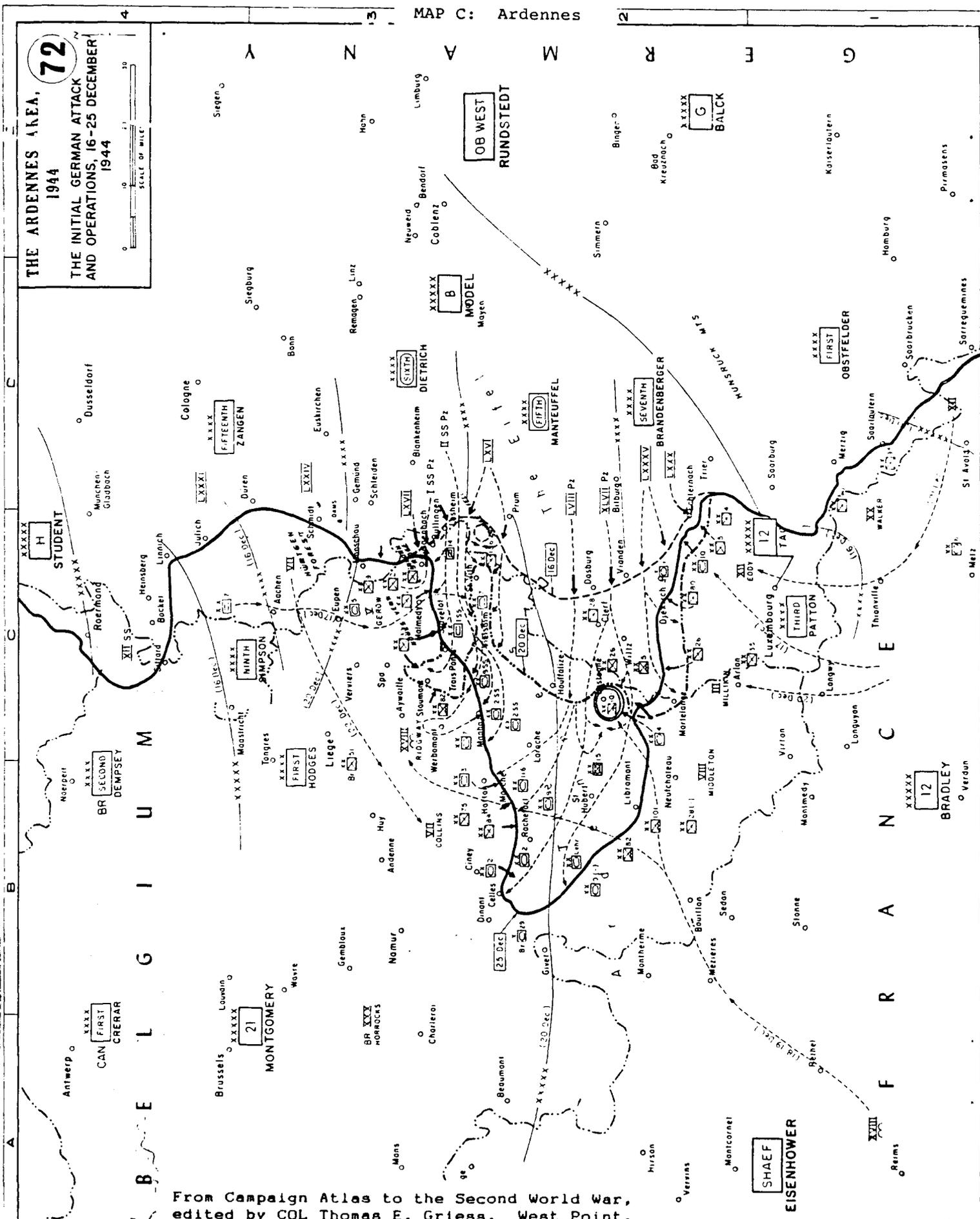
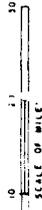
Front Line Forecast in Plan <D+#>

- AXIS OF ADVANCE, 21 ARMY GROUP
- AXIS OF ADVANCE, FIRST U.S. ARMY
- AXIS OF ADVANCE, THIRD U.S. ARMY
- FRONT LINE, DATE INDICATED
- ↑ GERMAN COUNTERATTACK, 7 AUGUST
- HIGH GROUND, 100 METERS AND ABOVE



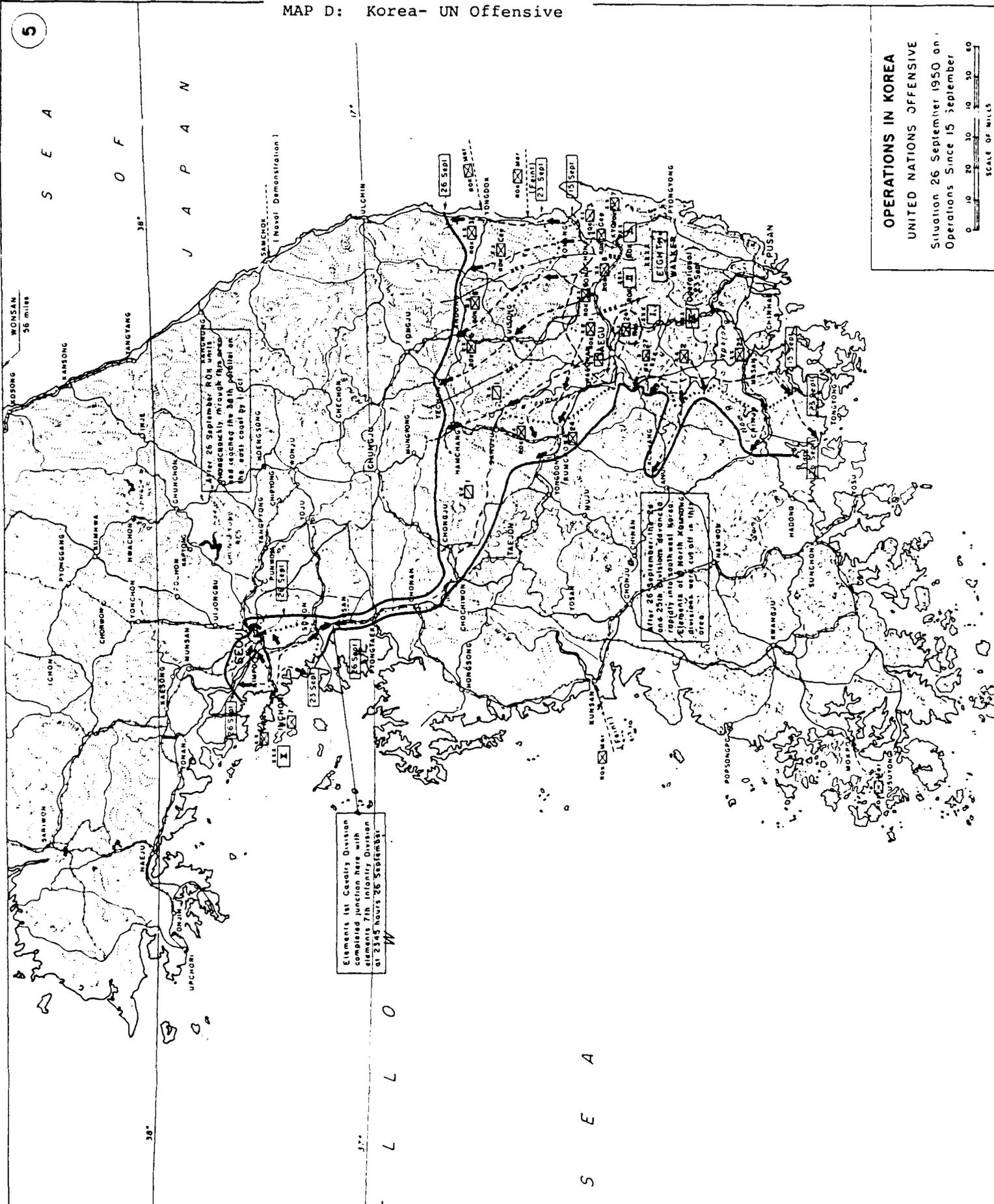
From Forrest C. Pogue, *The Supreme Command*; with forecast adapted from Carlo D'este, *Decision in Normandy*, p. 91.

THE ARDENNES AREA, 1944
72
THE INITIAL GERMAN ATTACK AND OPERATIONS, 16-25 DECEMBER 1944



From Campaign Atlas to the Second World War, edited by COL Thomas E. Griess. West Point, NY: USMA Department of History, 1981, p. 72.

MAP D: Korea- UN Offensive



5

S E A

O F

J A P A N

38°

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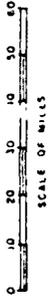
17°

37°

L L O

S E A

OPERATIONS IN KOREA
 UNITED NATIONS OFFENSIVE
 Situation 26 September 1950 on
 Operations Since 15 September



From West Point Atlas of American Wars,
 The Korean War, edited by BG V. J. Esposito.
 NY: Praeger Publishers, 1972, map 5.

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